CLAIMS

1. An interface configuration for an accessory, comprising:

an accessory microcontroller;

at least one accessory option detected by the accessory microcontroller; and

a serial memory device coupled to the accessory microcontroller, the serial memory device having accessory data stored therein, the accessory microcontroller reading the serial memory device and comparing the accessory data to the at least one detected accessory option, the accessory updating the serial memory device with the detected accessory option for self-configuration.

2. The interface configuration of claim 1, wherein the serial memory device is accessible locally from the accessory microcontroller, and the serial memory device is accessible remotely from a radio microcontroller.

3. The interface configuration of claim 2, further comprising a data bus for data communication between the radio microcontroller and the accessory microcontroller.

4. The interface configuration of claim 1, wherein the at least one accessory option is updatable.

5. A smart accessory for a communication device, the accessory comprising:

a memory device having accessory parameter data stored therein, the parameter data being accessible locally by the smart accessory and remotely by the communication device;

optional operating configurations stored within the smart accessory; and

wherein the smart accessory self-configures itself to operate over at least one of the optional operating configurations based on the parameter data, and the communication device adjust its operation in response thereto.

6. The smart accessory of claim 5, wherein the optional operating configurations include software options.

7. The smart accessory of claim 5, wherein the optional operating configurations include mechanical options.

8. The smart accessory of claim 5, wherein the optional operating configurations include electrical options.

9. The smart accessory of claim 5, wherein the optional operating configurations include software, mechanical, and electrical options.

10. A method for self-configuring a smart accessory, comprising the steps of:

providing a common electrical, mechanical, and software platform for the accessory with optional electrical, mechanical, and software configurations therein;

providing a memory device having accessory parameter data stored therein;

detecting the presence of an optional configuration;

updating the accessory parameter data of the memory device so as to self-configure the accessory to the detected optional configuration.

11. The method of claim 10, further comprising the step of adjusting a communication device based on the accessory configuration.

12. A method for self-configuring an accessory to a radio, comprising the steps of:

powering up an accessory having a serial memory device contained therein;

detecting the presence of options including mechanical, electrical, and software options within the accessory;

reading accessory parameter data from the serial memory device;

comparing the accessory parameter data to the detected options;

configuring the accessory for the detected options if the step of comparing did not result in a match;

detecting the presence of the accessory by the radio; and

operating the radio and accessory in accordance with the detected options.

13. An interface configuration for an accessory to be used with a communication device, comprising:

at the accessory:

an accessory microcontroller;

accessory options coupled to the accessory microcontroller; and

a serial memory device coupled to the accessory microcontroller, the serial memory device containing parameter data for the accessory that is accessible locally from the accessory microcontroller, the accessory microcontroller verifying and updating the parameter data to correspond with the accessory options; and

the updated parameter data available remotely to the communication device for operation of the accessory with the radio.

14. The interface configuration of claim 13, wherein the serial memory device is a single wire device.

15. The interface configuration of claim 13, wherein the serial memory device is a two wire device.

16. The interface configuration of claim13, wherein the serial memory device is a three wire device.

17. The interface configuration of claim13, wherein the accessory options include at least one of software, mechanical, and electrical options.